

REMARKS

This amendment responds to the Office Action mailed on October 29, 2008.

Claims 1-30 were previously withdrawn from consideration and are cancelled. Claims 38-43 are cancelled without prejudice. Claims 31, 44, 50 are amended and new claims 56 - 61 have been added. Support for the new claims can be found at least at paragraphs [0021], [0059], [0028], and [0040] as originally filed. Reconsideration of all grounds of rejection is requested. The rejections are respectfully traversed below.

Section 112, 2nd Paragraph, Rejection

Claims 38-43 were rejected under U.S.C. §112, 2nd paragraph. These claims correspond to a computer readable medium that has code useful in method claims 31 *et seq.* Insofar as the method claims are broader in scope, the claims 38-43 have been cancelled without prejudice.

Section 103(a) Rejection

The Examiner rejected claims 31 – 55 under 35 U.S.C. §103(a) as being unpatentable over Pettey et al. (US Publication 2003/0014544) in view of Park et al. (US Publication 2002/0073322). This rejection is respectfully traversed below¹.

The subject application is directed to transmission control protocol (TCP) used for data communications. In order to provide security against denial of service attacks and the like, a connection negotiation phase is required before the TCP handshake. Without a successful connection negotiation, a TCP handshake is unable to complete, thereby preventing connection.

The Examiner agrees that Pettey does not disclose all of the features of claim 31.

However, the Examiner rejected claim 31, stating that Pettey modified in view of Park discloses the features of claim 31. The Examiner asserts that it would have been obvious to one of ordinary skills in the art at the time of invention to modify the method of Pettey to include a connection for the initiating party communication system that has already been negotiated by the receiving

¹ Pages 4, 6, 7 and 9 of the Office Action refer to Nickels, which Applicant believes is intended to be citation to Pettey and is treated as such herein.

party as said to be taught by Park in order to provide a security system and improve customer service.

However, the combination of Pettey and Park does not teach or suggest that any packet from a new client, which is not a connection request, can be ignored and discarded. Accordingly, the combination does not teach or suggest transmitting a handshake packet for a TCP/IP connection from the initiating party computer to the receiving party computer as recited in claim 31, or the total combination of features as recited in claim 31.

Pettey discloses a standard TCP handshake procedure in which there is a synchronized handshake with a client. Pettey discloses that the TCP/IP connection is established and a three-way handshake is completed. At that point, the TCP/IP connection is established between the client and the server. Further, Pettey discloses using an infiniband fabric for accelerating the TCP/IP connections between the server and clients. See paragraphs [0019], [0069], [0107], [0120] and [0121]. Pettey does not teach or suggest securing the TCP/IP connection. Moreover, there is no suggestion in Pettey that transmitting a handshake packet for a TCP/IP connection from the initiating party computer to the receiving party computer as recited in the amended claim 31.

In contrast, according to the subject application claims, if a connection request is followed by a TCP handshake then the TCP connection can be opened, otherwise the server does not respond. And, in order to provide security against denial of service attacks and the like, a connection negotiation phase is required before the TCP handshake. The subject application establishes a secure and fast TCP/IP connection.

Park discloses a public key encryption for defending denial-of-service attack which has a very complex mathematical algorithm and high software complexity. In Park, a client must provide an encrypted random number that it had already received from the server. See paragraph [0029]. This means that there first must be some public key/private key exchange and the server must have already communicated with the client to provide it with an encrypted random number.

Therefore, in Park, the system may be open to a flooding denial of service attack as the server presumably must still respond to requests for an encrypted random number.

Again, in contrast the invention does not require a key encryption to authenticate the connection. Hence, the subject application does not have an overhead of key exchange, encryption, etc. The subject application makes the connection easier to establish, yet secured. Therefore, the subject application features that any packet from a new client, which is not a connection request, can be ignored and discarded.

With regard to claim 50, the Examiner has not cited any basis to render obvious the claim feature of the connection request message comprising an IP datagram. Claim 50 recites, an initiating device adapted to send a connection request message prior to the transmission of a handshake packet for a TCP/IP connection, the connection request message comprising an IP datagram. It is true that Pettey discloses that once a TCP connection has been established an IP datagram is used for communication. In particular, Pettey discloses that once the server 1210 has performed the functions corresponding to frame/packet/datagram reception within each of its MAC/IP/TCP processing layers, the connection request in payload 1234 is copied to the message reception buffer of the mail server application program. See paragraph [0121]. However, in claim 50, the IP datagram is used to announce the connection and TCP synchronization handshake; hence the TCP handshakes that are not preceded by an appropriate IP datagram are ignored by the server. Thus, Pettey is different in already having an established TCP connection. Further, Park does not disclose anything about the IP datagram. Accordingly, the proposed combination of Pettey in view of Park cannot be understood as fairly teaching or suggesting the recitations of claim 50.

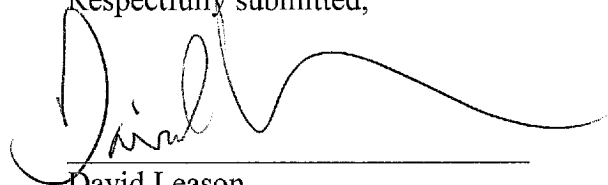
Based on the above explanations and arguments, it is respectfully submitted that the proposed combination of Park and Pettey cannot be fairly understood as rendering obvious claim 31. The applicant respectfully asserts that as claims 32 – 37, 56, 58 and 59 are dependent on claim 31 and should be allowable at least for that dependency and in view of their own further

recitations. The applicant respectfully requests reconsideration and removal of the rejections of claims 31 – 37, 56, 58 and 59.

Independent claims 44 and 50 recite the same features noted above with respect to claim 31, and therefore distinguish over the references for the reasons detailed above. Applicant respectfully asserts that because claims 45 – 49, 57 and 60 are dependent on claim 44 and claims 51- 55 and 61 are dependent on claim 50, these claims are also allowable at least in view of that dependency and their own further recitations.

The applicant respectfully requests that all the rejections be withdrawn.

Respectfully submitted,



David Leason
Registration No. 36,195
Attorney For Applicant(s)

Dated: April 28, 2009

Leason Ellis LLP
81 Main Street, Suite 100
White Plains, New York 10601
(914) 288-0022